

## **Center for Pediatric Obesity and Diabetes Prevention Research**

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### **Background**

To facilitate both research and treatment of obesity in youth who are at especially high risk for diabetes, we have created the Center for Pediatric Obesity and Diabetes Prevention Research. The mission of the center is to advance the health of vulnerable populations through obesity and diabetes prevention research focusing on mechanisms of progression from obesity to type 2 diabetes, defining best practices for obesity/diabetes prevention among youth, and cost-effective translation of the research to the community.

### **Specific Aims**

1. To promote the clinical investigation of pathophysiologic mechanisms, diagnosis, and primary prevention of type 2 diabetes among vulnerable youth
2. Foster collaboration and facilitate interdisciplinary research between investigators interested in childhood obesity and diabetes prevention
3. Participate in community-based diabetes prevention research

### **Key Ongoing Collaborative Research Projects**

#### **Youth Diabetes Prevention Clinic (YDPC) – Patient-Centered Outcomes Project**

This program is designed to evaluate and assess the needs of adolescents (ages 10 – 21) who have evidence of prediabetes. Our goal is to successfully intervene in the trajectory toward the development of diabetes, and to promote healthy weight-control and improved well-being through an individualized treatment plan. Not only has this allowed us to address a significant unmet clinical need, but also to advance pediatric obesity patient-centered outcomes research and comparative effectiveness research in adolescent obesity / diabetes prevention.

#### **Dietary Intervention for Glucose Intolerance in Teens (DIG-IT Study)**

The objective of this study is to determine the impact on glycemic control, in adolescents who have pre-diabetes, of an individually-tailored wellness coaching strategy used to modify lifestyle habits. Additionally, the study aims to identify lifestyle factors that drive glycemic control, independent of changes in weight. We are conducting this study in the Youth Diabetes Prevention Clinic via a collaboration with Dr. Gletsu-Miller (Purdue University).

#### **ENCOURAGE Healthy Families Study**

This is a randomized trial evaluating the comparative effectiveness and costs of an adaptation of the Diabetes Prevention Program (DPP) directed at mothers and their children. The intervention is a group-based lifestyle program which we developed and implemented in partnership with the YMCA. We are comparing the ENCOURAGE intervention targeted to 1) mothers who have had gestational diabetes or prediabetes, and 2) mothers who have had GDM or prediabetes *along with their school-aged children*.